Application No. 10/585,651

Filed: July 07, 2006 TC Art Unit: 1652 Confirmation No.: 5481

AMENDMENT TO THE CLAIMS

- 1. (Currently Amended) A therapeutic composition comprising a polypeptide comprising a therapeutically active portion of a lysyl oxidase pro-peptide, said polypeptide being in a pharmaceutically acceptable carrier substance therefore, wherein said lysyl oxidase pro-peptide portion of said polypeptide is therapeutically—active in inhibiting cell growth or proliferation, wherein said polypeptide does not have lysyl oxidase catalytic activity, and wherein said lysyl oxidase pro-peptide portion of said polypeptide is that of human, mouse or rat.
- 2. (Original) The therapeutic composition of claim 1, wherein said polypeptide is active in inhibiting cell growth in soft agar.
- 3. (Original) The therapeutic composition of claim 1, wherein said polypeptide is active in inhibiting tumor formation.
- 4. (Currently Amended) The therapeutic composition of claim 1, comprising a polypeptide comprising a lysyl oxidase pro-peptide having the amino acid sequence of SEQ ID NO.: 1 or SEQ ID NO.: 2, wherein said lysyl oxidase pro-peptide portion of said polypeptide is active in inhibiting cell growth or proliferation and wherein said polypeptide does not have lysyl oxidase catalytic activity.
- 5. (Currently Amended) The therapeutic composition of claim 1, comprising a polypeptide comprising a lysyl oxidase pro-peptide having the amino acid sequence selected from the group consisting of SEQ ID NOs:3, 4, 5, 6, 7 and 8, wherein said lysyl oxidase propeptide portion of said polypeptide is active in inhibiting cell

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growth or proliferation and wherein said polypeptide does not have lysyl oxidase catalytic activity.

- 6. (Cancelled)
- 7. (Cancelled)
- 8. (Withdrawn) A method of treating a patient, said method comprising the steps of:

providing a patient suffering from cancer; and administering to said patient a therapeutically effective amount of the composition of claim 1.

- 9. (Withdrawn) The method of claim 8, wherein said patient suffers from a form of cancer dependent on ras signaling for cell transformation.
- 10. (Withdrawn) A method of treating a patient, said method comprising the steps of:

providing a patient suffering from a disease or disorder that occurs via elevated ras-dependent signaling; and

administering to said patient a therapeutically effective amount of the composition of claim 1.

11. (Withdrawn) The method of claim 9, wherein said patient suffers from colon, breast, lung or prostate cancer.

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(Withdrawn) The method of claim 10, wherein said disease or 12.

disorder is selected from the group consisting of diseases or

disorders of the kidney, cardiovascular system and immune system.

1.3. (Withdrawn) The method of claim 10, wherein said patient

suffers from a bone disease.

The method of claim 13, wherein said bone

disease is an osteopenic condition.

15. (Withdrawn) The method of claim 14, wherein said bone

disease is osteoporosis.

A method of identifying a therapeutically active 16.

portion of a lysyl oxidase pro-peptide, said method comprising the

steps of:

a) providing cells transformed with an oncogene, wherein

growth of said transformed cells is known to be inhibited by a

polypeptide comprising a lysyl oxidase pro-peptide, wherein said

lysyl oxidase pro-peptide portion of said polypeptide is active in

inhibiting cell growth or proliferation, wherein said polypeptide

does not have lysyl oxidase catalytic activity, and wherein said

lysyl oxidase pro-peptide portion of said polypeptide is that of

human, mouse or rat;

b) culturing said cells in the presence of a fragment of said

lysyl oxidase pro-peptide polypeptide of length l_1 , wherein said l_1

fragment is known to comprise said active portion of said lysyl

oxidase pro-peptide polypeptide;

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- c) determining a value for the effectiveness of said l_1 fragment in inhibiting growth of said transformed cells;
- d) culturing another aliquot of said cells with a smaller portion of said l_1 fragment of said lysyl oxidase pro-peptide polypeptide, said smaller portion being of length l_2 ;
- e) determining a value for the effectiveness of said l_2 fragment in inhibiting growth of said transformed cells; and
- f) repeating steps d) and e) with progressively smaller portions of said $\mathbf{1}_1$ fragment of said lysyl oxidase pro-peptide polypeptide, of length $\mathbf{1}_i$, until the minimum sized active portion of said lysyl oxidase pro-peptide is determined.
- 17. (New) The method of claim 16, wherein said lysyl oxidase pro-peptide has the amino acid sequence of SEQ ID NO.: 1 or SEQ ID NO.: 2.
- 18. (New) The method of claim 16, wherein said transformed cells are cultured in soft agar.